Morgan Lewis

Andrew D. Lipman
Tamar E. Finn
Patricia Cave
andrew.lipman@morganlwis.com
tamar.finn@morganlewis.com
patricia.cave@morganlewis.com

REDACTED – FOR PUBLIC INSPECTION

August 6, 2018

VIA ECFS

Ms. Marlene H. Dortch, Secretary
Federal Communications Commission
Office of the Secretary
445 12th Street, S.W.
Washington, DC 20554

Re: **WC Docket No. 18-141 - *Petition of USTelecom for Forbearance Pursuant to 47 U.S.C. § 160(c) to Accelerate Investment in Broadband and Next-Generation Networks Opposition of* U.*S. TelePacific Corp., Mpower Communications Corp. and Arrival Communications, Inc.***

Dear Secretary Dortch:

On behalf of U.S. TelePacific Corp., Mpower Communications Corp. and Arrival Communications, Inc. (all dba "TPx"), and in accordance with the procedures outlined in the Protective Order,[1] enclosed for filing is the redacted version of the Opposition of U.S. TelePacific Corp., Mpower Communications Corp. and Arrival Communications, Inc. and supporting Declaration of Russell Shipley, Executive Vice President Wholesale, Engineering and Operations of TPx, for filing in this proceeding.

[1] *In the Matter of Petition of USTelecom for Forbearance Pursuant to 47 U.S.C. §160(c) to Accelerate Investment in Broadband and Next-Generation Networks,* WC Docket No. 18-141, DA-18-575, ¶¶ 5, 13, Protective Order (rel. June 1, 2018).

Morgan, Lewis & Bockius LLP

1111 Pennsylvania Avenue, NW
Washington, DC 20004
United States

T +1.202.739.3000
F +1.202.739.3001

The CONFIDENTIAL version of the Opposition and supporting Declaration have been filed by hand delivery and copies sent to Pamela Megna of the Wireline Competition Bureau, Competition Policy Division.

Any questions relating to this filing should be directed to the undersigned.

Respectfully Submitted,

/s/ Tamar E. Finn

Andrew D. Lipman
Tamar E. Finn
Patricia Cave

Counsel for U.S. TelePacific Corp., Mpower Communications Corp. and Arrival Communications, Inc. (all dba "TPx")

Attachment

REDACTED – FOR PUBLIC INSPECTION

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Petition of USTelecom for Forbearance Pursuant	)	
To 47 U.S.C. §160(c) to Accelerate Investment	)	WC Docket No. 18-141
In Broadband and Next-Generation	)	
Networks	)	
	)	
	)	
	)	

Opposition of U.S. TelePacific Corp., Mpower Communications Corp., and Arrival Communications, Inc.

William P. Hunt III
SVP and General Counsel
TPx Communications
515 S. Flower Street, 45th Floor
Los Angeles, CA 90071
(303) 268-5420 (tel)
william.hunt@tpx.com

Andrew D. Lipman
Tamar E. Finn
Patricia Cave
MORGAN LEWIS & BOCKIUS LLP
1111 Pennsylvania Ave., NW
Washington, DC 20004-2541
202.739.3000 (tel)
202.739.3001 (fax)
Andrew.lipman@morganlewis.com
tamar.finn@morganlewis.com
patricia.cave@morganlewis.com

Counsel for U.S. TelePacific Corp., Mpower Communications Corp., and Arrival Communications, Inc., all d/b/a TPx Communications

Dated: August 6, 2018

TABLE OF CONTENTS

REDACTED – FOR PUBLIC INSPECTION

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Petition of USTelecom for Forbearance Pursuant	)	
To 47 U.S.C. §160(c) to Accelerate Investment	)	WC Docket No. 18-141
In Broadband and Next-Generation	)	
Networks	)	
	)	
	)	
	)	

Opposition of U.S. TelePacific Corp., Mpower Communications Corp., and Arrival Communications, Inc.

U.S. TelePacific Corp., Mpower Communications Corp., and Arrival Communications, Inc., all doing business as TPx Communications (collectively "TPx") oppose the petition filed by USTelecom for forbearance from legacy unbundled network elements ("UNEs") and resale obligations ("Petition").[1] TPx supports INCOMPAS's Motion to Summarily Dismiss the Petition because USTelecom fails to state a *prima facie* case for forbearance even when viewed in the light most favorable to the Petition.[2] If the Commission does not summarily dismiss the Petition, it should refuse to grant the forbearance USTelecom seeks because USTelecom has failed to provide "convincing analysis and evidence" that satisfies the forbearance test.

---

[1] *Petition of USTelecom for Forbearance Pursuant to 47 U.S.C. § 160(c) to Accelerate Investment in Broadband and Next-Generation Networks*, WC Docket No. 18-141 (filed May 4, 2018) ("USTelecom Petition"); *See also,* Public Notice, *Pleading Cycle Established For Comments on USTelecom's Petition for Forbearance from Section 251(c) Unbundling and Resale Requirements and Related Obligations, and Certain Section 271 and 272 Requirements,* WC Docket No. 18-141, DA 18-475 (rel. May 8, 2018) ("*Public Notice*").

[2] Motion for Summary Denial of INCOMPAS, WC Docket No. 18-141 (filed Aug. 6, 2018).

I. Executive Summary: Thousands of TPx Customers Would Be Impacted by Forbearance from Incumbent LEC UNE and Resale Obligations

When the Communications Act of 1934, as amended by the Telecommunications Act of 1996, broke the monopoly hold on the local exchange markets, it established three paths for a competitive carrier to enter the market. The first allowed competitors to build their own facilities by granting access to rights of way. The second allowed competitors to purchase and use unbundled network elements ("UNEs") at a forward-looking rate while ensuring that the incumbents received a "reasonable profit" for the use of their network. The third allowed competitors to purchase using an avoided cost model and then resell those services. Each step was designed to drive competition and incent providers to invest in their networks if they were successful in attracting customers.

That financial model drove an explosion in investment into new network technologies like fiber optic and wireless communication services. Based on that macro policy of creating competition, companies undertook the hard work at a micro level to deploy networks, bundle UNEs and resell competitive services to meet the unique needs of customers. While USTelecom argues on a macro level that the pricing standards applied to UNEs and resold services should be thrown out as antiquated and unused vestiges of the Telecom Act, the truth in the trenches, where networks rest and sales are made, is that the need is as strong as ever for making UNEs and resold services available under their current pricing regime.

Contrary to USTelecom's unsubstantiated assertions, UNEs and resold services are crucial ingredients in the customized, mission-critical telecommunications services sought by small and medium business ("SMB"), school, health care and community anchor institution customers. In order to meet demand from these types of customers, TPx purchases more than

270,000 unbundled DS0 loops from incumbent LECs under Section 251(c)(3) to provide broadband to SMBs, business phone lines, and wholesale services.[3] TPx pays incumbent providers for 122,000 unbundled 2-wire bare copper loops ("DS0 loops") to provide Ethernet over Copper ("EoC") broadband service to customers in nearly 14,000 locations in California, Nevada and Texas at prices cheaper than incumbent solutions.[4] School, healthcare, non-profit and community anchor institutions account for almost 3,000 of TPx's existing customers.[5] Many wholesale services are created using UNEs, in part, and TPx has approximately 90 wholesale customers served by UNEs in California, Nevada and Texas.[6] On the network level, no reasonably comparable wholesale alternative exists for DS0 loops. Even if a customer wanted to migrate to fiber and if migrating was affordable based on their service level, fiber may not be available and is so expensive, without universal service support, they cannot afford fiber-based services. Absent unbundling the majority of TPx's EoC customers would be deprived of access to broadband – in some cases not just competitively priced broadband – but ANY broadband service.

TPx also uses approximately 148,000 analog DS0 loops and 12,000 resold lines to provide plain old telephone service ("POTs").[7] The majority of these POTs customers require TDM lines for alarm and fax services. Ending incumbent LECs' obligations to offer analog DS0 loops and the wholesale discount for resold services would result in diminished competition and price increases for these customers.

---

[3] Declaration of Russel Shipley, ¶ 9 ("Shipley Decl.").

[4] Shipley Decl., ¶¶ 8-11.

[5] Shipley Decl., ¶ 5.

[6] Shipley Decl., ¶ 38.

[7] Shipley Decl., ¶ 34.

TPx has invested considerable capital to deploy broadband to underserved customers within its footprint using DS0 loops. By investing millions of dollars in collocation and EoC gear, TPx has enabled broadband service to customers that have no practical alternative supplier Many of these customers face the prospect of losing broadband service in the absence of UNEs.

The complex evaluation of whether the Commission should end incumbent LECs' UNE and Section 251(c)(4) resale obligations warrants the same careful consideration the Commission applied to prior UNE forbearance petitions and business data services ("BDS") reform. The Petition offers no empirical evidence of significant actual or potential competition for retail broadband services to SMB customers by competitors that rely on their own last-mile connections in each geographic market to serve customers. Nor has USTelecom identified the geographic markets where customers can obtain facilities-based service from non-incumbent LEC providers of broadband and TDM phone services. The Petition expects the Commission to ignore this complex analysis and give incumbent LECs carte blanche to finance their expansion into other business through price hikes imposed on the end users of their wholesale customers. The Petition also ignores the tremendous costs that consumers would bear from service or technology changes due to the premature elimination of UNE and resale requirements.

While public policy favors fiber as the "next generation" of communications infrastructure, the fact that incumbent LECs have not deployed fiber throughout their footprint shows how difficult and expensive fiber deployment is. There are many small and medium size businesses that do not need, or cannot afford, a fiber solution when existing copper-based solutions meet their business needs and budgets. Absent UNE-based competition, incumbent LECs would be free to raise rates with impunity, and where the incumbent LEC is the sole provider of facilities and services, there is no reason to expect it to offer services competitive

rates. The Commission should not forbear from the incumbent LECs' UNE and resale obligations without understanding the impact of the loss of competition on end users.

The Petition proposes a macro-solution – *i.e.*, the elimination of UNEs and resale – while ignoring the impact at a micro level where competitive providers have crafted unique, individual solutions for millions of competitive connections. USTelecom even ignores how its members will handle the back-end operations needed to transition millions of customer circuits before the February 2021 cut off and at what cost to competitors and their customers. The Commission must evaluate on a micro-level the enormous adverse impact sunsetting UNEs would have on these customers.

The Commission cannot evaluate the impact of USTelecom's proposal without extensive analysis of the costs to customers of replacing UNE and resold service inputs. TPx has explored ordering fiber Ethernet for some of its customers, and it is not uncommon for the incumbent LECs to charge more than **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** to build fiber to deliver a 5 Mbps service. In one California city, an incumbent LEC proposed to charge over **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** for a 5 Mbps fiber Ethernet connection and **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** for a 10 Mbps connection to two locations.[8] In addition to any fiber build cost, moving from DS0 loops to a fiber loop would increase TPx's input costs by **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** per month, plus **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** in one-time provisioning charges. All these costs would have to be passed through to customers creating sticker shock.[9]

---

[8] Shipley Decl., ¶ 17.

[9] Shipley Decl., ¶¶ 24-25.

The millions of competitive connections served by UNEs and resale, including the thousands of SMB and anchor institution customers purchasing tailored communications services from TPx, deserve alternatives to keep their preferred services and preferred provider without astronomical price increases. And, the Commission needs this information to evaluate the cost of forbearance to consumers and determine whether the increased wholesale costs will reduce competitive options that constrain incumbent LECs' retail prices in today's marketplace. The Commission cannot conduct a meaningful cost-benefit analysis without evidence regarding the impact of forbearance on American businesses and consumers.[10]

There are better alternatives available to USTelecom's membership than asking the Commission to scramble millions of economic relationships all to their benefit. First, if the incumbent LECs believe that TELRIC pricing is too low, they can seek recourse from the respective state public utility commission that set the rates pursuant to Congress' mandate or ask the Commission to complete its long-dormant rulemaking addressing the TELRIC methodology.

Another option is to develop and market now the "commercial arrangements" that USTelecom claims will follow forbearance. If those products are going to be better for competitive providers, why not offer them now? It's an unjustified leap of faith for regulators to think that incumbents will not unreasonably increase rates if granted forbearance. The

[10] *See In the Matter of Establishment of the Office of Economics and Analytics*, Order, 33 FCC Rcd. 1539 (rel. Jan. 31, 2018) (establishing the Office of Economics and Analytics to provide rigorous economic analysis for rulemakings and other Commission actions), Statement of Chairman Ajit Pai, 33 FCC Rcd. at 1549 (stating that "cost-benefit analysis allows [the Commission] to intelligibly apply [the public interest standard]"), Statement of Commissioner Michael O'Rielly 33 FCC Rcd. at 1551 (stating that a cost-benefit analysis must be "credible and accurate"), Statement of Commissioner Brendan Carr, 33 FCC Rcd. at 1553 (supporting codification of "a renewed commitment to the role that economic analysis should play in [the Commission's] decision-making").

incumbents can eliminate much of the uncertainty of a post-forbearance world by offering their commercial offerings now. They don't need the Commission to grant forbearance to do that.

For the past 22 years, competitive providers have brought investment, jobs and innovation to the Nation's economy using the roadmap established by Congress. Now that the table has been set with millions of competitive connections relying upon UNEs and resold services for their specialized, unique services, USTelecom wants the Commission to pull the tablecloth out from under two decades of investment and competition. The FCC should decline that opportunity.

II. USTelecom Fails to Meet the Statutory Standard for Forbearance

USTelecom "bears the burden of proof – that is, of providing *convincing analysis and evidence* to support its petition for forbearance."[11] The Petition does not meet this burden.

The Commission may grant forbearance when the Petitioner demonstrates that "(1) enforcement of such regulation … is not necessary to ensure that the charges … in connection with that telecommunications carrier or telecommunications service are just and reasonable and are not unjustly or unreasonably discriminatory; (2) enforcement… is not necessary for the protection of consumers; and (3) forbearance… is consistent with the public interest."[12] This analysis "consider[s] whether forbearance from enforcing the provision or regulation will promote competitive market conditions, including the extent to which such forbearance will enhance competition among providers of telecommunications services."[13] The Petition would

---

[11] *Petition to Establish Procedural Requirements to Govern Proceedings for Forbearance Under Section 10 of the Communications Act*, Report and Order, 24 FCC Rcd. 9543, 9554, ¶ 20 (2009) (emphasis added).

[12] 47 U.S.C. § 160(a).

[13] 47 U.S.C. § 160(b).

end the UNE-based competition that Congress mandated and that the Commission later relied on to justify relaxed regulation of numerous services, deprive consumers of the benefit of competition and increase prices.

Competition is the most effective means of ensuring that charges are just and reasonable and not unreasonably discriminatory.[14] In the *Qwest Phoenix Forbearance Order*, the Commission evaluated Qwest's market power to gauge whether sufficient competition existed to ensure prices would remain just and reasonable if it granted forbearance.[15] Under the *Qwest Pho*enix standard, a petitioner could show sufficient facilities-based competition in the wholesale market or from "a number of significant, full facilities-based competitors providing the relevant retail services."[16] But the Commission made clear that forbearance would be denied where the incumbent LEC "either individually or in conjunction with a small number of firms, could profitably sustain supracompetitive prices."[17]

---

[14] *See Business Data Services in an Internet Protocol Environment*, Report and Order, 32 FCC Rcd. 3459, 3516, ¶ 124 (2017) ("*BDS Order*"); see also *Petition for Declaratory Ruling to Clarify 47 U.S.C. § 572 in the Context of Transactions Between Competitive Local Exchange Carriers and Cable Operators; Conditional Petition for Forbearance from Section 652 of the Communications Act for Transactions Between Competitive Local Exchange Carriers and Cable Operators*, Order, 27 FCC Rcd. 11532, 11544, ¶ 27 (2012) (quoting *Petition of U S WEST Communications Inc. for a Declaratory Ruling Regarding the Provision of National Directory Assistance; Petition of U S WEST Communications, Inc., for Forbearance; The Use of N11 Codes and Other Abbreviated Dialing Arrangements*, Memorandum Opinion and Order, 14 FCC Rcd. 16252, 16270, ¶ 31 (1999)).

[15] *Petition of Qwest Corporation for Forbearance Pursuant to 47 U.S.C. § 160(c) in the Phoenix, Arizona Metropolitan Statistical Area*, Memorandum Opinion and Order, 25 FCC Rcd. 8622, 8647, ¶ 43 (2010) ("*Qwest Phoenix Forbearance Order*").

[16] *Id.*

[17] *Id.*

The determination of whether continued enforcement of a regulation is "not necessary for the protection of consumers" tracks the competitive analysis.[18] The Commission must engage in a rigorous analysis of competition "by defining the relevant product and geographic markets"[19] and "examining whether there are any carriers in those markets that, individually or jointly, possess significant market power."[20] USTelecom bears the burden of proving through "convincing analysis and evidence" that forbearance is warranted. USTelecom's request for forbearance from the remaining legacy unbundling obligations implicates both wholesale and retail markets. Yet it has not defined the relevant product markets, explained why it would be reasonable for the FCC to define the relevant geographic market as "national," or shown that incumbent LECs lack significant power in each relevant market.

Because USTelecom has not met its burden, the Commission should deny the Petition. Rather than end a critical option to facilitate market-entry upon which competitors (and their customers) continue to rely, USTelecom's members should (1) avail themselves of natural forbearance when they actually deploy fiber on a specific route if they want to end their unbundling obligations or (2) file petitions with state public utility/service commissions if they believe UNE pricing levels should be adjusted.

The Petition fails the test and the Commission should deny it.

---

[18] *Qwest Phoenix Forbearance Order*, 25 FCC Rcd. at 8671, ¶ 92; *See also Petition of NTCA—The Rural Broadband Association and the United States Telecom Association for Forbearance Pursuant to 47 U.S.C. § 160(c) from Application of Contribution Obligations on Broadband Internet Access Transmission Services*, Order, FCC 18-75, ¶ 9 (rel. June 8, 2018).

[19] *Qwest Phoenix Forbearance Order*, 25 FCC Rcd. at 8646, ¶ 42.

[20] *Id.* at 8632, ¶ 21.

III. USTelecom's Petition Fails All Prongs of the Forbearance Test

Congress adopted measures to foster competition without requiring competitors to duplicate the incumbent LECs network.[21] Section 251 remains a key component of these market opening measures. USTelecom's proposed forbearance would *not* promote "competitive market conditions,"[22] but would inhibit competition and harm consumers.

The broad forbearance sought by the incumbent LECs nullifies the bargain struck by the Commission with the incumbent LECs beginning with the *Triennial Review Order* ("*TRO*").[23] In the *TRO* and resulting forbearance decisions,[24] the Commission granted incumbent LECs substantial relief from unbundling obligations conditioned on their deployment of fiber to replace their legacy copper networks.[25] Now the incumbent LECs seek to get the benefit of that bargain – more regulatory relief – without holding up their end of the deal and deploying fiber networks.

---

[21] *BellSouth Telecomms., Inc. v. Southeast Tel., Inc. and Kentucky P.S.C.*, 462 F.3d 650, 652 (6th Cir. 2006).

[22] 47 U.S.C. § 160(b); *Qwest Forbearance Order* 25 FCC Rcd. at 8674, ¶ 104.

[23] *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers; Implementation of the Local Competition Provisions of the Telecommunications Act of 1996; Deployment of Wireline Services Offering Advanced Telecommunications Capability*, Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, 18 FCC Rcd. 16978, 17089 ¶ 176 (2003) ("*TRO*"), *corrected by Errata*, 18 FCC Rcd. 19020 (2003), *vacated and remanded in part, aff'd in part, United States Telecom Ass'n v. FCC*, 359 F.3d 554 (D.C. Cir 2004) (*USTA II*), *cert. denied*, 543 U.S. 925 (2004), *on remand, Unbundled Access to Network Elements; Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, Order on Remand, 20 FCC Rcd. 2533 (2005) ("*TRRO*"), *aff'd, Covad Commc'ns Co. v. FCC*, 450 F.3d 528 (D.C. Cir. 2006).

[24] *Petition for Forbearance of the Verizon Telephone Companies Pursuant to 47 U.S.C. § 160(c); SBC Communications Inc.'s Petition for Forbearance Under 47 U.S.C. § 160(c); Qwest Communications International Inc. Petition for Forbearance Under 47 U.S.C. § 160(c); BellSouth Telecommunications, Inc., Petition for Forbearance Under 47 U.S.C. § 160(c),* Memorandum Opinion and Order, 19 FCC Rcd. 21496 (2004) (*"Section 271 Broadband Forbearance Order"*).

[25] *TRO*, 18 FCC Rcd. at 17216-17, ¶ 385.

Consider that as of today, thousands of incumbent LEC local serving offices are not Ethernet-enabled, which means competitors cannot buy wholesale Ethernet to reach customers served by those offices.[26] To make matters worse, any incumbent LEC can eliminate its copper loop unbundling requirement by deploying fiber and retiring the copper – even where a competitive LEC is using that copper to serve customers.[27] It would be folly for the Commission to afford incumbent LECs broad regulatory relief without their moving any dirt to deploy fiber.

A. The Commission Should Apply the Phoenix Market Test Rather than a Nationwide Test in Evaluating USTelecom's Petition

USTelecom fails to demonstrate through "convincing analysis and evidence" the availability of competitive alternatives at the customer location -- the relevant geographic market under the *Qwest Phoenix Forbearance Order*. Commission precedent is clear—and incumbent LECs have agreed[28]—that forbearance is subject to a ***market-by-market review*** for legacy unbundling obligations. As the Commission stated, a nationwide analysis is not appropriate here since USTelecom seeks forbearance from its UNE obligations.[29]

---

[26] Shipley Decl., ¶ 18.

[27] *Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment*, Report and Order, Declaratory Ruling, and Further Notice of Proposed Rulemaking, 32 FCC Rcd. 11128 (2017).

[28] *See* Reply Comments of Verizon Comments, WC Docket 14-9, at 7 (filed July 14, 2014) (stating that Qwest Phoenix Order "concerned legacy TDM services and does not apply to broadband services"); Comments of AT&T Services, Inc., WC Docket 14-9, at 4 (filed July 7, 2014) (stating that "high-capacity broadband packet-switched and optical services" implicate the Commission's Section 706 broadband deployment goals compared to legacy TDM-based services).

[29] *Qwest Phoenix Forbearance Order*, 25 FCC Rcd. at 8644, ¶ 39 ("[a] different [nationwide] analysis may apply when the Commission addresses advanced services, like broadband services, instead of a petition addressing legacy facilities.").

Contrary to USTelecom's view, the *BDS Order* did not rely on a national standard. Instead, the Commission evaluated potential competitors within a half-mile radius of a location with BDS demand and categorized counties as competitive or non-competitive depending on whether a certain percentage of the census blocks had a nearby competitor offering, or capable of offering, BDS.[30]

The *BDS Order* found that a relevant geographic market is where consumers can turn for alternative sources and within which providers can reasonably compete.[31] Small business and residential customers do not look nationally to identify their service provider for broadband and POTs service that TPx and other competitors offer at superior prices. The Petition includes no empirical evidence of significant actual or potential competition for retail broadband services to SMB customers by competitors that rely on their own last-mile connections in each geographic market to serve customers.[32] Indeed, USTelecom fails to provide any "convincing analysis or evidence" for ANY geographic market. Nor does USTelecom offer "convincing analysis or evidence" showing the fiber networks that are within one-half mile of each UNE customer's location to show the customer can obtain facilities-based service as an alternative to the competitor's UNE-based service.

USTelecom's reliance on forbearance orders that utilized a nationwide framework is misplaced.[33] These orders (*e.g.*, the *Section 271 Broadband Forbearance Order*, the *Enterprise Broadband Order*, the *2015 USTelecom Forbearance Order*, and the *2016 Switched Access Non-*

---

[30] *BDS Order*, 32 FCC Rcd. at 3499 ¶ 86.

[31] *BDS Order*, 32 FCC Rcd. at 3479, ¶ 39.

[32] *Qwest Phoenix Forbearance Order*, 25 FCC Rcd. at 8668, ¶ 87.

[33] USTelecom Petition at 2, n.3.

Dominance Order, distinguished below), focused on *broadband* elements (as opposed to legacy UNEs), relied on price-regulated alternatives to "backstop" forbearance, or relied on other nationwide regulatory reforms to constrain incumbents' ability to drive up prices. Because three of the four relied on availability of price-regulated Section 251 UNEs to discipline the market for forborne services, relief from continued Section 251 unbundling obligations would be inconsistent with those prior forbearance grants.

For example, the *Section 271 Broadband Forbearance Order* only addressed the independent access obligations under Section 271 for broadband elements that were no longer UNEs because the Commission had already relieved those *broadband elements* (such as fiber loops deployed in greenfield situations) from unbundling under Section 251 on a national basis in the *Triennial Review Order*.[34] Similarly, the *Enterprise Broadband Order* limited forbearance to specific non-TDM broadband services identified by AT&T that were provided to retail enterprise customers with national, multi-location operations (*e.g.*, optical network services, wave-based services, frame relay services, ATM services, LAN services, Ethernet-based services, and video transmission services). The Commission's analysis focused on the impact of dominant carrier rules on the ability of the incumbent LEC (*e.g.*, AT&T) to compete for enterprise customers with national, multi-location operations.[35] The Commission found that dominant carrier regulations inhibited AT&T from responding quickly to customers' demands

[34] *See* supra n. 23.

[35] *Petition of AT&T Inc. for Forbearance Under 47 U.S.C. § 160(c) From Title II and Computer Inquiry Rules with Respect to its Broadband Services, Petition of BellSouth Corp. for Forbearance Under 47 U.S.C. § 160(c) From Title II and Computer Inquiry Rules with Respect to its Broadband Service*, Memorandum Opinion and Order, 22 FCC Rcd. 18705, 18718, ¶ 20, n. 86 (2007) ("*Enterprise Broadband Order").*

for innovative service arrangements tailored to each customer's individualized needs.[36] The Commission recognized that the broadband services for which AT&T sought relief were purchased predominantly by enterprise customers (*i.e.,* they were retail services), not their competitors as wholesale inputs.[37] The Commission found that "competition for these enterprise broadband services tends to be based on either competitive deployment of facilities or use of special access inputs"[38] and limited forbearance to packet-switched services and non-TDM-based services.[39]

In contrast, UNEs are legacy network elements purchased by incumbent LECs' competitors and used to serve residential and SMB customers in local markets. Although the Commission can "reasonably tailor its analysis to the situation at hand," customer locations served by UNEs include more than just the large, multi-location national enterprise broadband customers that were the impetus for the *Enterprise Broadband Forbearance Orders*.

The Commission's *2015 USTelecom Forbearance Order* ended a variety of incumbent LEC obligations, including obligations in Sections 271 and 272, legacy equal access regulations, the nondiscrimination and imputation requirements, and the requirement to make a 64 kbps voice channel over fiber available where an incumbent LEC retires its copper. The Commission relied

---

[36] *Id.* at 18725, ¶ 33.

[37] *Id.* at 18718, ¶ 21, n. 90 (noting that granting forbearance "will not affect" the ability for competitors who purchase wholesale inputs to obtain traditional DS1 and DS3 special access services or UNEs as inputs or affect their ability to self-deploy OCn facilities and services or to obtain them from non-incumbents).

[38] *Id.* at 18717, ¶ 20.

[39] *Id.* at 18706, n. 4 (noting that "all traditional, TDM-based, DS1 and DS3 services, and all services that do not provide a transmission capability of over 200 kilobits per second (kbps) in each direction" were excluded from forbearance).

on the retention of Section 251 requirements and other regulations[40] acting as "backstops" and a lack of evidence that competitors were relying on independent unbundling obligations in Section 271, when it was not clear from the record that competitive providers actually relied on the Section 271.[41] The only Section 251 obligation the Commission forbore from was the requirement to provide a 64 kbps channel for voice. Forbearance was granted based on nominal demand for such channels by competitors and grandfathering of 64 kbps channels that were in use.[42] In contrast, there is a continued and substantial competitor demand for loop unbundling. To evaluate the impact on consumers and pricing under the statutory standard, the Commission must analyze the impact of UNE-based competition in each local market. USTelecom provides no such market-by-market evidence. Although USTelecom ***claims*** nationwide UNE demand has decreased,[43] CALTEL's comments show UNE usage has *increased* in California since 2006.[44]

In the *2016 Switched Access Non-Dominance Order*, the Commission's decision was based not on a competitive analysis but "on changes to the regulatory structure of interstate switched access that are largely independent of [competitive] trends [and] is not dependent on the extent of competition among geographic and product markets for retail voice services."[45]

---

[40] *2015 USTelecom Forbearance Order*, 31 FCC Rcd. at 6169, ¶ 18 (expecting that "the substantive section 251 obligations will continue to be enforced through interconnection agreements and complaints filed under section 203 of the Communications Act).

[41] *Id.* at 6172-73, ¶ 27 (stating that "there is … no evidence in the record that competitors are providing services through unbundled loops, transport, or databases and signaling specifically available under the independent checklist obligations").

[42] *Id.* at 6194, ¶ 66.

[43] USTelecom Petition, at 16.

[44] Comments of CALTEL, WC Docket 18-141, at 16-20 (filed Aug. 6, 2018).

[45] *Technology Transitions, USTelecom Petition for Declaratory Ruling That Incumbent Local Exchange Carriers Are Non-Dominant in the Provision of Switched Access Services, Policies and Rules Governing Retirement of Copper Loops by Incumbent Local Exchange*

Because the interstate switched access charge reforms impacted similarly-situated incumbent LECs equally nationwide, the Commission saw no need to disaggregate its market power analysis based on geographic or product markets.[46] Unlike switched access, no comprehensive regulatory overhaul akin to the *USF/ICC Transformation Order* has negated incumbent LECs' wholesale market power and the Commission may not rely on the *Switched Access Non-Dominance Order* to depart from the analytical framework for UNE forbearance.

B. "Robust Competition" Does Not Exist in the Product Markets for Retail Bandwidth at or below 50 Mbps for SMB and CBO Customers, Retail Business POTs Lines, or Wholesale DS0s

The competition that the Commission predicted would emerge over several years – and has yet to emerge – in the BDS market does not satisfy the standard of "robust competition" necessary to forbear from incumbent LECs' loop unbundling obligations in each specific market. "It is clear Congress wanted to enable entry by multiple competitors through the use of the [incumbent LECs'] network" and evidence of "robust competition" is required to forbear from "Congress' imposition of unbundling obligations as a tool to open local telephone markets to competition."[47] USTelecom does not pretend to show that each incumbent LEC lacks individual market power in any relevant product market, nor does it examine evidence regarding market shares. Instead, it states that markets are competitive without providing supporting data or analysis.

As the first step of the analysis, USTelecom must define the relevant product market(s). The Commission looks to see if services are "reasonably substitutable to determine an

---

Carriers, Declaratory Ruling, Second Report and Order, and Order on Reconsideration, 31 FCC Rcd. 8283, 8293, ¶ 29 (2016) ("*Switched Access Non-Dominance Order*").

[46] *Id.* at 8294, ¶ 31.

[47] *Qwest Phoenix Forbearance Order*, 25 FCC Rcd. at 8639, ¶ 32.

appropriate product market."[48] The Commission recognizes that "inherent differences" between services (such as providing different functionalities and being tailored to serve different consumer needs) may warrant evaluating services separately despite similarities.[49] USTelecom does not define the product markets, let alone analyze them as is required to justify forbearance. TPx contends the relevant product markets are the wholesale market for DS0 facilities, the retail markets for residential, SMB and CBO customers with a need for broadband service of 50 Mbps or below and POTs services.[50]

1. TDM-based Business Telephone Service Provided Over Copper Loops Is a Distinct Product Market

Business POTs lines are a distinct product market that requires a separate analysis when determining whether sufficient competition exists to forbear from legacy unbundling obligations. To the extent that USTelecom asserts that competition for voice services from cable and wireless offerings justifies forbearance, it fails to understand the dynamics of the marketplace and conflates "voice service" and POTs (which customers continue to use for communications that are not traditional "voice" communications).

In most cases, TPx customers want POTs for their fax and/or alarm services *in addition* to voice and broadband. TPx uses about 148,000 analog DS0 loops to provide POTs service and resells approximately 12,000 POTs lines.[51] These numbers do not include the approximately

---

[48] *BDS Order*, 32 FCC Rcd. at 3479, ¶ 39.

[49] *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, 2018 Broadband Deployment Report, 33 FCC Rcd. 1660, 1666 ¶ 18, n. 39 (2018).

[50] *Qwest Phoenix Forbearance Order*, 25 FCC Rcd. at 8645, ¶ 41 ("section 10 'imposes no particular mode of market analysis or level of geographic rigor,' but rather 'allow[s] the forbearance analysis to vary depending on the circumstances.'").

[51] Shipley Decl., ¶ 34.

[BEGIN CONFIDENTIAL] [redacted] **[END CONFIDENTIAL]**local wholesale complete offerings purchased from AT&T. VoIP, whether facilities-based cable or over-the-top, is not a substitute for TPx customers of POTs. Nor is wireless voice service a reliable substitute for POTs because, mobile services, like VoIP, require a separate power source.[52]

2. Broadband Service of 50 Mbps and Below Provided to SMBs and CBOs Is a Distinct Product Market

USTelecom does not distinguish retail broadband product markets based on capacity, as required under the *Qwest Forbearance Order*.[53] The *BDS Order* evaluated competition for TDM-based broadband services of 50 Mbps and below as a separate market and found that even in markets deemed competitive, certain businesses are at non-competitive locations.[54] Although the *BDS Order* evaluated the market for enterprise broadband, it did not evaluate the market for SMB or CBO broadband. TPx's analysis of competitive alternatives for its SMB and CBO customers confirm the lack of fiber broadband alternatives to most EoC customer locations. And there are no direct commercial substitutes for the approximately 122,000 DS0 loops TPx uses to provide EoC to about 14,000 customer locations. This lack of alternatives does not satisfy the "robust competition" required to forbear from an incumbent LEC's obligation to offer unbundled DS0 loops that enable TPx and other competitors to offer 50 Mbps and below broadband service.

---

[52] Shipley Decl., ¶ 35. The Commission declined to recognize wireless as a substitute for POTs as recently as the February 2018 Voice Telephone Services Report. Voice Telephone Services Report: Status as of December 31, 2016, Industry Analysis Technology Division Wireline Competition Bureau, n. 3 (Rel. Feb. 2018) (stating that "presentation of mobile wireless telephone subscriber counts in this report does not constitute, or imply, Commission analysis of the extent to which wireline and mobile wireless telephone services are demand substitutes or complements in general or any particular situation").

[53] *Qwest Phoenix Forbearance Order*, 25 FCC Rcd. at 8648, ¶ 49.

[54] *BDS Order*, 32 FCC Rcd. at 3521-22, ¶135.

3. Wholesale DS0 Market

The *Qwest Forbearance Order* requires the FCC to analyze the wholesale market.[55] USTelecom does not show that a carrier other than the incumbent LEC provides substitute *wholesale* services throughout each geographic market.[56] Unlike a commercial offering such as special access service, a competitive LEC can combine a DS0 loop with its equipment, collocation, and other investments to provide differentiated services to its SMB and CBO customers. TPx can deploy its own electronics on the DS0 loop, customizing and controlling the services provided, including service quality and security. TPx is not aware of any wholesale commercial offerings in the states it serves that would provide similar functionality or flexibility as the DS0 loop. If DS0 loops were no longer available as UNEs, TPx would have to cease offering broadband service via EoC to nearly 14,000 customer locations and find a different means to deliver broadband to those customers or pass through the price increases associated with commercial substitutes for UNEs eventually developed by the incumbent LECs.[57]

Many wholesale services are created using UNEs, at least in part. TPx serves approximately 90 wholesale customers in California, Nevada and Texas using UNEs.[58] TPx can deliver a UNE that enables the wholesale customer to expand its service area, provide its retail end user with redundant circuits without the need to construct additional, dedicated infrastructure, and/or provide middle mile connections for wholesale customers. For example, utilizing middle mile UNEs from TPx, its wholesale customer GeoLinks was able to construct

---

[55] *Qwest Phoenix Forbearance Order*, 25 FCC Rcd. at 8673-74, ¶¶ 96-100.

[56] *Id.* at 8659, ¶ 71.

[57] Shipley Decl., ¶ 9.

[58] Shipley Decl., ¶ 38.

last mile connections throughout a predominantly agricultural region, offering a competitive choice to consumers and high-speed broadband connections to areas that had previously been without.[59] If the Commission forbears from unbundling requirements, customers providing broadband and POTs service via TPx's wholesale offerings would lose access to their wholesale products. The USTelecom Petition offers no "convincing analysis and evidence" to the contrary and does not show any "significant alternative sources of wholesale inputs" to UNEs.[60]

4. USTelecom Has Not Shown the Availability of Substitute Services

USTelecom's Petition proposes a macro-level solution for an industry where the impact is at a micro level that involves millions of competitive connections with individual solutions created for competitive LECs' customers' financial and business needs. Ending incumbent LECs' obligations to offer 1 million unbundled loops used to provide broadband, and another million unbundled loops used to provide 2.3 million competitive switched access lines, is not as simple as flipping a switch.

It is also not the case, as USTelecom assumes without support, that fiber-based Ethernet is an alternative available to all UNE-based EoC customers. As data from the BDS data collection show, just 77 percent of BDS locations have just one full facilities-based provider in-building and more than 99 percent have two or fewer.[61] As Mr. Shipley explains, over 74 percent of TPx's existing EoC customer locations do not have fiber at their location.[62] Because the

---

[59] Shipley Decl., ¶ 39.

[60] *Qwest Phoenix Forbearance Order*, 25 FCC Rcd. at 8659, ¶ 70.

[61] *See* Marc Rysman, *Empirics of Business Data Services*, 31 FCC Rcd. at 4933 tbl. 7 ("Rysman White Paper"), Appendix B to *Business Data Services in an Internet Protocol Environment*, Tariff Investigation Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd. 4723 (2016).

[62] Shipley Decl., ¶ 14.

average TPx EoC customer orders approximately 15 Mbps of Ethernet, (1) bonded DS1s cannot provide that broadband speed and (2) fiber providers may not be able to justify building fiber loops to each of these 9,700+ customer locations even over the medium term of several years.[63] Absent unbundling, approximately 74 percent of TPx's nearly 14,000 EoC customer locations could be deprived of access to broadband – in some cases not just competitively priced broadband, but any broadband – because it may not be feasible to build fiber to serve the SMB locations at their current bandwidth levels.

The following case studies highlight the point:[64]

> 1. A business customer in California required broadband speeds of 50 Mbps. TPx contacted the incumbent provider which quoted special construction costs of **[BEGIN CONFIDENTIAL]** [redacted]. **[END CONFIDENTIAL]** The incumbent LEC's proposed special construction costs proposed for orders of 5 Mbps and 10 Mbps were even greater (*i.e.,* more than **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** and **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** respectively).
>
> 2. Another incumbent LEC proposed a special construction cost of more than **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** for a 50 Mbps fiber build to one business location in a suburban city in Texas with a density of over 700 people per square mile, demonstrating that this is not only an issue in rural areas but extends to the ability of providers to deploy fiber.[65]

In 2012, TPx evaluated extending fiber loops from its existing transport network to buildings which lack fiber alternatives to EoC. TPx started with **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** buildings. After substantial diligence and analysis, TPx reduced its list to approximately **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** near-net buildings. Even then TPx could not establish a business case due to the cost associated with fiber

---

[63] Shipley Decl., ¶¶ 8, 12.

[64] Shipley Decl., ¶ 17.

[65] These rural areas are served by the former Regional Bell Operating Companies and not the small rural incumbent LECs that are exempt from unbundling requirements.

deployment, including the cost and time of obtaining necessary municipal/local permits which can take over a year in some cases. TPx estimated that it would cost at least **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**per location to extend fiber loops to buildings which lack fiber alternatives to EoC, including for locations within 1,000 feet of TPx's existing network.[66] Due to the high cost of extending fiber loops, TPx has found that it must have enough demand from customers to justify the high sunk costs of expanding its network to near-net buildings.[67] TPx bridges the gap by purchasing UNEs, which enables TPx to build a customer base with enough demand to support incremental fiber investments.[68] Without access to UNEs, TPx's ability to scale its infrastructure to meet demand will be stymied.

Even if fiber were available in the building, many small businesses do not want to pay the monthly rate increase associated with the higher cost of fiber-based replacement services. TPx would incur approximately **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** per month in loop cost increases for all EoC locations where fiber is now available—an increase TPx will have to pass on to the customer. For example, the average monthly cost for a fiber Ethernet circuit (all bandwidths) is **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** and the average monthly cost for a 5 to 20 Mbps fiber Ethernet circuit is **[BEGIN CONFIDENTIAL]** [redacted][69] **[END CONFIDENTIAL]** By contrast, the average monthly DS0 loop cost for existing EoC customers is $96.56 (*i.e.*, 8.86 loops per location multiplied by

[66] Shipley Decl., ¶ 16.

[67] Shipley Decl., ¶ 16.

[68] Shipley Decl., ¶ 16.

[69] Shipley Decl., ¶ 23.

TELRIC $10.89 average UNE loop rate).[70] Moving from copper-based broadband to fiber-based broadband could also impose additional costs on end user customers, such as non-recurring provisioning costs (average of **[BEGIN CONFIDENTIAL]** [redacted]), **[END CONFIDENTIAL]**building entrance fees if fiber is not already installed at the customer's location, and equipment charges.[71] Most multi-tenant commercial buildings do not allow free timely access to entrance facilities, vaults, risers, power, and security environments required to provide service, and TPx has finds common recurring costs of **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** for building access.[72]

The Petition is bereft of any explanation of what services incumbent LECs will offer to replace the millions of voice and broadband connections competitive LECs supply using UNEs and resold services. The Petition includes no data on the post-forbearance prices consumers will pay for broadband they now receive using EoC. The Petition provides no guarantee that DS0 loops or a commercial replacement product will be offered following forbearance.

If USTelecom wants unbundling relief for its incumbent LEC members it must identify now, as part of this Petition, the commercial services and prices that its members plan to make available in the event forbearance is granted. If the Petition is granted and its Draconian provisions allowed to go into effect, competitive providers will have no bargaining power and will be forced to accept whatever new pricing and conditions the incumbent LEC imposes under the threat of their customers losing service.

---

[70] Shipley Decl., ¶ 23.

[71] Shipley Decl., ¶ 25.

[72] Shipley Decl., ¶ 21.

This is an untenable proposition for competitive LECs and their customers who may be forced to make substantial new and uneconomical investments or discontinue service as a result of the loss of UNEs. Congress foresaw the harms that would result from deregulation before competition has developed and competitive LECs still used the incumbent LECs' UNEs when it declined to adopt an automatic sunset of the unbundling obligations.[73] Instead of expiring by operation of law, the legacy unbundling obligations can only be removed by an act of Congress or by demonstrating through convincing evidence and analysis that forbearance is warranted. The Commission has an opportunity to ensure that technology transitions continue to benefit end-user customers (whether residential or business customers located in rural, suburban, or urban areas) and the economy at large by preserving a critical Section 251 market-entry framework that Congress adopted and the Commission implemented. It is imperative that USTelecom present their plans to regulators and competitors that rely on UNEs to compete before the Commission grants any forbearance from the obligations upon which competition in local markets has been able to grow for over two decades.

C. Unbundling of DS0 and DS1 Loops is Necessary to Ensure Just and Reasonable Incumbent LEC Rates

Competitive high-speed broadband offered over DS0 loops gives SMBs and CBOs a choice of providers where little if any competition exists. Having a choice of broadband providers gives customers "new broadband services, better service quality, greater selection, and lower prices."[74] The average retail rate for a 10 Mbps EoC service TPx provides to its customers

---

[73] *See* Remarks of Sen. Pressler (S.D.) on Pub. L. 104-104 (1995), 141 Cong. Rec. S8163 (1995).

[74] *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the*

is **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** which is less than the assumed $400 for 10 Mbps UNE-based broadband USTelecom used in their economic study.[75] Because the availability of UNEs disciplines incumbent LEC rate and non-rate terms[76] and the Commission has relied on UNE-based competition in numerous other forbearance actions, the Commission should deny the Petition.

1. USTelecom's Proposed Transition is Unreasonable and Interferes in Small Business's Operations

Ending TPx's ability to order new or additional UNEs would harm customers and competition. Only 25 percent of TPx's EoC broadband customers have existing fiber alternatives at their location,[77] but even these customers chose copper-based services due to the price point and other reasons. This is consistent with data from the BDS data collection showing that 77 percent of BDS locations have just one full facilities-based provider in-building[78] and for locations with relatively low bandwidth demand (*i.e.*, 50 Mbps or lower) there are even fewer options (*i.e.*, 86 percent).[79] From its relationships with its customers, TPx understands that there are many SMBs or anchor institutions for whom existing copper-based solutions meet their business needs and limited budgets. Services like EoC give new life to copper facilities and provide lower level bandwidth solutions for businesses and other customers who do not need or cannot afford to spend the extra money for fiber-based connectivity.

Broadband Data Improvement Act, 2015 Broadband Progress Report and Notice of Inquiry on Immediate Action to Accelerate Deployment, 30 FCC Rcd. 1375, 1459 ¶ 150 (2015).

[75] USTelecom Petition, App. B, Figure 8.

[76] *TRRO*, 25 FCC Rcd. at 2575, ¶ 65.

[77] Shipley Decl., ¶ 14.

[78] *See* supra n. 61.

[79] Letter from John T. Nakahata, Counsel to Windstream, to Marlene H. Dortch, Secretary, FCC, at 3, WC Docket Nos. 16-143 et al. (filed Oct. 21, 2016).

Assuming the Commission were to grant the Petition, TPx customers might not be able to increase their bandwidth, add additional services, or rectify service problems caused by failures in the copper loops provisioned as of the order's effective date. In short, such restrictions will harm consumers by restricting their ability to run their businesses in a sensible way. This harms competition by putting TPx (and other similarly situated competitors) at a competitive disadvantage in continuing to serve existing customers. The transition away from legacy unbundling obligations would cause unnecessary rate increases through unconstrained increases in wholesale input prices, in particular for SMBs and CBOs that opt for existing copper services instead of fiber, are price-sensitive and do not want (or do not have the resources) to spend the extra money for fiber.

Ending TPx's ability to order UNEs to serve new customers would also harm customers and competition. The Petition proposes no commercial replacement services and the Commission has found that BDS are inadequate substitutes for UNE loops.[80] With no access to UNEs or reasonable replacements, competitive LECs would be at a disadvantage in the market as of the day after the grant of forbearance. USTelecom has not identified the geographic markets where customers can obtain facilities-based service from non-incumbent LEC providers of broadband and TDM phone services. Absent UNE-based competition, incumbent LECs would be free to raise rates with impunity. USTelecom has failed to demonstrate how incumbent LEC rates will remain just and reasonable given the loss of competition.

USTelecom bears the burden of demonstrating why and how rates would remain just and reasonable after forbearance. It cannot "turn[] the first part of the forbearance test in Section 10 completely on its head by creating a presumption that rates will remain just and reasonable until

[80] *Qwest Phoenix Forbearance Order*, 25 FCC Rcd. at 8641, ¶ 35.

an injured party demonstrates otherwise."[81] USTelecom admitted that UNE rates will rise following forbearance when it proposed a transition framework with an immediate 15 percent rate increase.[82] Although USTelecom has since reached a "compromise" with Windstream to prohibit price increases before February 2021, the Commission can predict with certainty that rates will increase by a similar amount, if not more, after February 2021. USTelecom cannot offer any "convincing analysis or evidence" that rates will not increase because there are no reasonably comparable competitive alternatives available for DS0 loops and resold voice services.

UNE rate increases would result in higher retail rates as competitors pass those increased wholesale costs to retail customers. Even if an existing contract limited the ability for such a provider to raise their rates (as incumbent LECs would have under USTelecom's initial proposal), subsequent contracts, including renewals would reflect the provider's increased wholesale costs. Because retail rates already account for costs associated with collocation, building access, electronics, labor, etc., TPx would most likely need to pass any increase in its input costs directly to its customers to remain profitable and continue providing services.[83]

2. The Availability of UNEs Disciplines Incumbent LEC Rates

It would be arbitrary and capricious to end incumbent LECs' few remaining section 251 legacy loop unbundling obligations when the Commission repeatedly relied on the availability of UNEs to justify prior forbearance and regulatory reforms.[84] One year ago, the Commission relied

---

[81] Opposition of SBC Communications Inc., at 24, WC Docket No 03-266 (filed March 1, 2004).

[82] USTelecom Petition at 44.

[83] Shipley Decl., ¶ 24.

[84] *See* Section III.A.

on the "medium term" of "several years" to ensure that incumbent LEC BDS rates would remain just and reasonable after regulation. As the Commission found, "the use of UNEs, where available, allow competitors to effectively compete in lower bandwidth services."[85] Without continued loop unbundling obligations, there will be no UNE competition on which the BDS findings rely.

The *BDS Order* found that continued rate regulation was necessary to ensure just and reasonable special access rates in counties that were deemed not competitive. In these counties, the Commission predicted that "there is a substantial likelihood that competition will fail to ensure just and reasonable rates."[86] In non-competitive counties, UNE obligations should be retained to impose price discipline on incumbent LEC retail rates.

The *BDS Order* is not the only time the Commission relied on UNEs to ensure just and reasonable rates. In its *Enterprise Broadband Order*, the Commission found that potential AT&T competitors had the option to use Section 251 UNEs as wholesale inputs for their enterprise broadband services.[87] Likewise, the *Section 271 Broadband Forbearance Order* relied in part on competitors' access to Section 251 UNEs to compete with the incumbent LECs' broadband services.[88] Similarly, forbearance in the *2015 USTelecom Forbearance Order* relied to a large

---

[85] *BDS Order*, 32 FCC Rcd. at 3476, ¶ 32.

[86] *Id.* at 3503, ¶ 96.

[87] *Enterprise Broadband Order*, 22 FCC Rcd. at 18721-22, ¶ 25 (stating that even where competitors do not have the option of self-deploying facilities or purchasing inputs from carriers other than the incumbent LEC, potential providers may rely on special access services purchased from the incumbent LEC at rates subject to price regulation and excluded from forbearance).

[88] *Section 271 Broadband Forbearance Order*, 19 FCC Rcd. at 21507, n. 68 (finding forbearance warranted despite lower levels of competition in the enterprise customer market from cable providers "[b]ecause competitive LECs can still obtain access to network elements

extent on the existence of regulatory "backstops" in the form of Section 251 and other regulations[89] as well as a lack of evidence that competitors were relying on independent unbundling obligations in Section.[90]

USTelecom's proposed transition is inadequate to continue the rate pressure UNE-based competition places on incumbents' rates. This puts the Commission in the awkward position of destroying business plans for competitive providers when an order becomes effective. As then-Commissioner Pai stated, the Commission "must identify something else [other than an economic regulation] that will constrain pricing, and that something else has always been—and can only be—competition."[91] Because USTelecom has not shown by "convincing analysis and evidence" that facilities-based competition is sufficient to discipline incumbent LECs' rates in the relevant product markets, the Commission must deny the Petition.

3. SMBs and other Customers Rely on DS0 Loop Based Services in Geographic Markets Lacking Fiber Alternatives

In many cases, the locations where customers receive service with DS0 loop inputs are in urban areas outside the central business district, suburban or rural areas where the only facilities-based provider is the incumbent LEC. As such it is not economical for a facilities-based

---

under section 251 to serve business customers"). *See also* 19 FCC Rcd. at 21509, ¶ 26 (noting that competitive LECs would still have access to other network elements after forbearance).

[89] *2015 USTelecom Forbearance Order*, 31 FCC Rcd. at 6169, ¶ 18 (expressing expectation that "the substantive section 251 obligations will continue to be enforced through interconnection agreements and complaints filed under section 203 of the Communications Act).

[90] *Id.* at 6172-73, ¶27 (stating that "there is … no evidence in the record that competitors are providing services through unbundled loops, transport, or databases and signaling specifically available under the independent checklist obligations").

[91] *Protecting and Promoting the Open Internet, WC Docket No. 14-28, Report and Order on Remand, Declaratory Ruling, and Order*, 30 FCC Rcd. 5601, 5978 (2015) (dissenting Statement of Comm'r Pai).

competitive LEC or the cable company to extend facilities to the location for such a small volume of business. For those businesses, absent the UNE obligations Congress adopted in the 1996 Act, reasonably priced incumbent LEC wholesale replacement services are the only vehicle by which the customer can obtain the benefits of competition. The Commission's forbearance analysis examines the evidence and "evaluate[s] whether potential entry could occur in a timely, likely, and sufficient manner to counteract the exercise of market power by" incumbent LECs or incumbent LECs operating in concert with a few competitors (*e.g*, duopoly).[92] There is typically insufficient demand at these customer locations to justify a capital investment by competitors to extend their own facilities to these locations. This economic reality is even more acute in TPx's suburban markets, as well as in some urban areas on the fringes of the central business district.

Cable companies generally do not serve these rural and suburban commercial locations because they are not adjacent to their core residential service areas, nor are their services tailored for these customers. In any event, the Commission has found that an incumbent LEC and cable company duopoly is insufficient to warrant forbearance from legacy unbundling obligations.[93] Nor is there "convincing analysis and evidence" of significant competition with the incumbent LECs for the wholesale products that TPx uses to serve their customer base. As the Commission found, where the incumbent LEC "was the sole provider of wholesale facilities and services, there is no reason to expect it to offer such services at 'competitive' rates."[94] As a result of these marketplace realities, Section 251(c) is necessary to ensure consumers have a competitive alternative to incumbent LEC services and competitive rates in the relevant markets and thereby

---

92 *Qwest Phoenix Forbearance Order*, 25 FCC Rcd. at 8646, ¶ 42.

93 *Id.* at 8637, ¶ 30.

94 *Id.* at 8639-40, ¶ 34.

ensure that incumbent LEC rates, charges, classifications, and regulations are just and reasonable.

D. Enforcement of the Section 251 Obligations Are Necessary to Protect Consumers

Granting forbearance would eliminate, or substantially raise the cost of, the dedicated broadband service provided to customers with nearly one million DS0 digital loops.[95] TPx uses EoC to provide broadband service to nearly 14,000 locations in California, Nevada and Texas. If the Commission grants the requested UNE loop forbearance, those customers are likely to lose the broadband service they rely on today or be forced to pay more.

1. Demand for UNE-based Services Remains Strong Even as Fiber-based Services Become More Prevalent

Contrary to USTelecom's implication, the ongoing transition to "Ethernet" services is not all fiber-based.[96] Unlike the 64 kbps loop, demand for DS0 loops is not "extremely modest," and TPx and other competitors provide Ethernet service using DS0 loops. TPx also uses UNEs to provide wholesale service to approximately 90 customers in California, Nevada and Texas. USTelecom provides no data to justify its claims that "[o]nly a small fraction of competitive offerings rely on the regulations from which [its members] seek forbearance,"[97] and the fact that Commission data shows competitive LECs use approximately one million UNEs to provide broadband access[98] proves otherwise.

UNE-based competition enables competitors to offer innovative services, tailored products, and dedicated customer service to SMB and CBO customers that might not be offered

---

[95] USTelecom Petition, App. B. at 15 (45.7 percent of 2,123,000 UNEs).

[96] USTelecom Petition at 13.

[97] USTelecom Petition at 19.

[98] USTelecom Petition, App. B. at 3.

by the incumbent LEC.[99] TPx customers appreciate the small company attention TPx provides as well as the innovative voice and data services TPx puts in place leveraging fiber, EoC and DS1 transport to maximize bandwidth and provide flexibility to adapt to their needs. Without continued access to UNEs, customers may no longer be able to afford or enjoy the competitive services TPx offers and may have to downgrade service speed or quality in order to avoid substantial rate increases.

TPx relies on access to certain Section 251 DS0 and DS1 loops to serve SMB and CBO customers. Freed from regulation of their wholesale rates, and any obligation to offer certain elements, incumbent LECs will deny competitive LECs access to bottleneck loop facilities or raise competitive LECs' costs, enhancing the incumbent LECs' prospects of attracting competitive LEC customers to incumbent LEC services. Consistent with basic competition theory, the Commission "has long recognized that a vertically integrated firm with market power in one market--here upstream wholesale markets where, . . . [the incumbent LEC] remains dominant--may have the incentive and ability to discriminate against rivals in downstream retail markets or raise rivals' costs" with the goal of "foreclos[ing] competitors from the market altogether."[100] Absent the unbundling obligations that exist, these SMB and CBO customers would have only one, or potentially two service providers. TPx would lose the ability to obtain a critical mass of customer demand needed to justify fiber investments resulting in less investment in fiber, collocations, and equipment by competitive LECs and less competition.[101]

---

[99] Qwest Forbearance Order, 25 FCC Rcd. at 8677, ¶ 108 (finding that UNE obligations have led some competitive carriers to invest in equipment and technologies to provide innovative broadband and video services over legacy copper loops).

[100] *Qwest Phoenix Forbearance Order*, 25 FCC Rcd. at 8639, ¶ 34.

[101] Shipley Decl., ¶ 16.

USTelecom asserts that incumbent LECs offer commercial Ethernet at wholesale as a replacement for UNEs. This is fiction. TPx data and past incumbent LEC practice proves otherwise. Incumbent LECs offer no current wholesale alternatives to DS0 loops; their potential Ethernet alternatives cost on average **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** more than bundled DS0 loops, and many incumbent LEC local serving offices are not Ethernet-enabled, which means competitive providers cannot get wholesale Ethernet to serve those customers. This is no surprise, as the Commission has observed: "there is little evidence… that the BOCs or incumbent LECs have voluntarily offered wholesale services at competitive prices once regulatory requirements governing wholesale prices were eliminated."[102] Absent continued Section 251 unbundling obligations, incumbent LECs are unlikely to offer any competitively priced wholesale substitutes. If incumbent LECs are permitted to eliminate their wholesale UNE loop offerings without providing comparably priced replacements (about which no details have been provided), the types of business and community customers served by TPx will be forced to pay higher prices for the broadband services they currently use, settle for inferior service at the same rate, or lose service altogether. If competitive LECs are forced to raise prices, incumbent LECs can either raise their prices, or use the price differential to lure customers away from competitive LECs. Once competitive LECs have left these markets because of their inability to offer competitively priced products, incumbent LECs will have free rein to raise prices above competitive levels.[103] These supra-competitive prices will harm consumers.

---

[102] *Qwest Phoenix Forbearance Order*, 25 FCC Rcd. at 8640, ¶ 34, n.105.

[103] *See id.* at 8637, ¶ 30.

2. Natural Forbearance Provides the Remedy USTelecom Seeks Without Harm to Underserved Markets and Customers

The D.C. Circuit has found that even when an alternative, such as "natural forbearance," can achieve the permissible goals (*i.e.*, fiber deployment), a regulation may continue to be necessary to protect consumers.[104] "Natural forbearance" maintains comparative parity and gives all providers incentive to upgrade their plant to fiber and introduce new services. Current regulations enable incumbent LECs to escape legacy unbundling obligations by upgrading their copper networks to fiber facilities, which are largely exempt from unbundling obligations.[105] Incumbent LECs can eliminate their DS0 loop unbundling obligation when they retire copper loops and invest in fiber. The actual deployment of fiber should be the carrot for regulatory relief, not the promise of future deployment. Actual fiber investment was the quid pro quo for "new wires, new rules" and the Commission should not rely on a predictive judgment based on imperfect or erroneous data that incumbent LECs will invest in fiber if it removes the "old rules" from copper wires.

Just as UNE-based competition provides incumbent LECs incentive to upgrade, "the availability of price-regulated UNEs has provided an incentive for competitive carriers to invest in facilities and operational support services to bring innovating new services to customers."[106] UNEs allow TPx and other competitive providers to scale their networks to meet realistic

---

[104] *CTIA v. FCC*, 330 F.3d 502, 510 (D.C. Cir. 2003) (stating that a measure may continue to be "necessary" despite acceptable alternative avenues).

[105] *See Qwest Phoenix Forbearance Order*, 25 FCC Rcd. at 8677, ¶ 108 (stating that "the unbundling obligations associated with legacy DS0 loop facilities, for example, might give Qwest incentives to deploy fiber-to-the-home, which is subject to more limited unbundling obligations").

[106] *Id.*

customer demand.[107] Competitive LECs using copper loops to provide broadband using EoC, for example, invest millions of dollars in equipment, and collocation arrangements to provide service. More than 300 of TPx's nearly 400 collocations support EoC and/or POTs service. TPx's approximately **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** investment per month in collocations in incumbent LEC central offices would be stranded investment if it lost access to UNEs.[108]

The Commission must evaluate the impact of ending this "natural forbearance" on retail rates and incumbent LEC incentives to deploy fiber. Without pressure from competitive offerings, incumbent LECs lack incentives to decrease prices or upgrade to fiber networks. Competitive LECs thus play a critical role by providing UNE-based voice and data services.

Congress designed Sections 251 and 252 to restrict the market power of incumbent LECs by requiring that rates be regulated, and forbearance would give incumbent LECs the unfettered ability to increase their competitors' wholesale input costs to eliminate competition and enable incumbent LEC retail price increases. To the extent that USTelecom's members take issue with the current rates charged for UNEs, the Act establishes a process to review and revise UNE rates. USTelecom's members can pursue those avenues instead of using forbearance to impose a price hike that would harm competition, consumers, and the public interest. Incumbent LECs may seek redress at state commissions to the extent that UNE prices need adjustment. Alternatively, incumbent LECs are free to upgrade legacy facilities to fiber and obtain natural forbearance through copper retirement.

---

[107] Shipley Decl., ¶ 16.

[108] Shipley Decl., ¶¶ 31, 34.

3. Unbundling Remains Necessary to Avoid Regulation-Driven Increases in Demand for Limited Universal Service Fund Resources

Unbundling obligations are necessary to protect consumers from increases in universal service fund ("USF") expenditures that are likely to result from a premature shift to all fiber networks driven by changes to regulations that only benefit incumbent LECs. Instead of supporting upgrades to fiber Ethernet based on demand, forbearance would result in substantial special construction investments to deploy fiber where it may not be wanted or needed. Forbearance also would eliminate competitive providers' ability to moderate prices for fiber-based services by removing reasonably priced UNE-based services from the market.

Of the approximately **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** school, healthcare, non-profit and community anchor institutions TPx serves using EoC, approximately **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** have no fiber-based broadband alternative at their location.[109] Should the Commission forbear from the incumbent LEC unbundling obligations, it will be difficult for competitive providers to serve those customers with a competitive broadband service at reasonably comparable rates (as program rules demand). The costs involved with switching from EoC to a fiber-based service, whether existing or a new build, likely would make continued competitive broadband service uneconomical for those customers not eligible for USF support.

For those customers eligible for USF support, the switch from EOC to fiber-based Ethernet will result in increased demand on the E-rate and RHC program and similar state universal service programs. Even if E-rate and RHC participants were able to keep their EoC services post-forbearance, eliminating incumbent LECs' UNE obligations will cause sudden

[109] Shipley Decl., ¶ 15.

price hikes under commercial agreements (to the extent offered). These customers (and the E-rate and RHC programs) will be paying more for the same services next year as they did last year without any improvement in quality. Artificially increasing demand for USF dollars in this way "encourages wasteful spending"[110] and harms consumers by increasing the universal service contribution rate on declining telecommunications revenues, which is passed along to and paid by customers on their telephone bills. The Commission should allow the market to drive fiber deployment where customers demand and can afford it.

E. Complete Forbearance from Section 251(c)(3) Is Inconsistent with the Public Interest in Promoting Competition to Reduce Prices and Incent Fiber Deployment and Innovative Services

Competition is in the public interest. The harm to the public interest from granting USTelecom's request for forbearance warrants extreme attention due to the substantial harm that customers of both incumbents and competitors would suffer.

- Customers would suffer from increased prices without UNE-based competition to check incumbent LECs' rates. *See* Section III.C.2.
- Innovation and customized service offerings would decrease because competitive LECs such as TPx compete on more than price. Customers benefit from TPx's innovative offerings in customer support, unified billing and other services that

[110] *In the Matter of Modernizing the E-rate Program for Schools and Libraries; Connect America Fund*, Second Report and Order and Order on Reconsideration, 29 FCC Rcd. 15538, 15637 (2014) (dissenting Statement of Comm'r Pai) (stating that the E-rate program as structured "encourages wasteful spending" and noting that some applicants will have to pay nothing out of pocket for new construction).

would be lost if TPx could not serve these customers without reasonably priced wholesale inputs.[111]

- Customers enjoying UNE-based broadband service today could lose that service or be forced to pay more for it or a substitute service. *See* Section II.D.1.
- Fiber deployment could be reduced because the Commission would remove the carrot of natural forbearance and the ability of competitors to grow their business through UNEs before building fiber connections. *See* Section II.D.2.

Unbundled DS0 loops are a mission-critical bridge between today's copper-based networks and the mainly-fiber networks of the future. Copper, fiber and wireless technologies should be used to their fullest by both competitive and incumbent LECs to ensure that customers enjoy broadband service. In the E-rate proceeding, USTelecom argued that "[c]opper loops are a fundamental building block in communications networks, including [] IP-based networks" and that "[t]echnology advances continue to extend the life and usefulness of copper facilities, providing greater speeds over existing copper plant."[112] Through this Petition, however, USTelecom would deny competitive LECs nondiscriminatory access to such copper network elements at just and reasonable prices. Incumbent LECs offer TPx wholesale dedicated Internet access service over any transmission means, including copper loops, and TPx has assisted incumbent LECs with best practices to manage their dedicated Internet access over copper services. For those incumbent LECs that continue to rely in part on copper loops or subloops to

[111] *See Qwest Phoenix Forbearance Order*, 25 FCC Rcd.*id.* at 8675, ¶ 103 ("forbearing from DS0 UNEs in particular could foreclose important choices for certain groups of customers.").

[112] Reply Comments of The United States Telecom Association WC Docket No. 13-184, at 6-7 (filed July 6, 2015).

offer broadband and phone service, denying their competitors nondiscriminatory access to those unbundled loops would thwart competition and is thus contrary to the public interest.

IV. Conclusion

The Commission must reject the Petition because if fails to provide a scintilla of "convincing analysis and evidence" that satisfies the forbearance test. The Petition does not demonstrate the availability of competitive alternatives at the customer location, define or analyze the product markets, or demonstrate why and how rates would remain just and reasonable after forbearance. What the Petition does offer "convincing analysis and evidence" of is a cynical bid to use the regulatory process to increase the costs of wholesale inputs relied upon by the competitors that compete against USTelecom's incumbent LEC members. This Petition is nothing more than an attempt to stifle competition and shift the costs of incumbent LECs' battle with the cable companies onto the backs of customers who choose service from competitive LECs. Under these circumstances, it would be arbitrary and capricious to end incumbent LECs' few remaining section 251 legacy loop unbundling obligations when the Commission repeatedly relied on the availability of UNEs to justify prior forbearance and regulatory reforms. The Commission should deny the Petition.

Respectfully submitted,
/s/ Andrew D. Lipman

Andrew D. Lipman
Tamar E. Finn
Patricia Cave
MORGAN LEWIS & BOCKIUS LLP
1111 Pennsylvania Ave., NW
Washington, DC 20004-2541
202.739.3000 (tel)
202.739.3001 (fax)
Counsel for U.S. TelePacific Corp., Mpower Communications Corp. and Arrival

Communications, Inc., all d/b/a TPx Communications

/s/ William P. Hunt III

William P. Hunt III
VP, Asst. General Counsel and Asst. Secretary
TPx Communications
515 S. Flower Street, 47th Floor
Los Angeles, CA 90071
(303) 268-5420

REDACTED – FOR PUBLIC INSPECTION

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
Petition of USTelecom for Forbearance Pursuant to 47 U.S.C. § 160(c) to Accelerate Investment in Broadband and Next-Generation Networks	)	WC Docket No. 18-141

DECLARATION OF RUSSELL SHIPLEY

1. My name is Russell Shipley and I am the Executive Vice President Wholesale, Engineering and Operations for U.S. TelePacific Corp. d/b/a TPx Communications ("TPx"). My business address is 515 S. Flower Street, 45th Floor, Los Angeles, CA 90071-2201.

2. I am authorized to make this declaration on behalf of TPx.

3. This Declaration is in support of the Opposition filed by TPx on August 6, 2018 to USTelecom's Petition for Forbearance.

4. As Executive Vice President Wholesale, Engineering and Operations, along with other responsibilities, I have overall responsibilities for planning, engineering, constructing and operating TPx's network. In addition, I am responsible for decisions about investment in TPx's network which includes evaluating TPx's ability to recover investment associated with deployments. I have been responsible for these activities in my current position or similar roles with telecommunications companies for approximately 33 years.

5. TPx is the nation's premier Managed Services Carrier, delivering unified communications, managed IT and network connectivity to approximately 55,000 customer locations across the country, including nearly 3,000 schools, healthcare, non-profit, and community anchor institutions.

6. TPx, the third largest carrier in California after AT&T and Frontier, relies on third parties to provide last mile access so it can provide competitive broadband services to its small and medium business ("SMB"), school, health care, and community anchor institution customers (together, community based organizations or "CBOs").

Customer Broadband Provisioned over UNEs

7. Copper plant is a crucial bridge between today's copper-based networks and the mainly-fiber networks of the future.

8. Forbearance that would end incumbent local exchange carriers' ("LECs") UNE obligations would have real, adverse consequences for competition and customers. TPx uses UNEs to provide Ethernet over Copper ("EoC") broadband service to nearly 14,000 locations in California, Nevada, and Texas. The average TPx EoC customer orders approximately 15 Mbps of Ethernet, a level of bandwidth that TPx has found does not generally incent providers to deploy fiber.

9. Unbundled access to a two-wire bare copper loop ("DS0 loop") allows TPx to provide customized, differentiated services to its SMB and CBO customers. TPx purchases more than 270,000 unbundled DS0 loops from incumbent LECs to provide broadband and Plain Old Telephone Service ("POTs") to small businesses. Unlike a commercial offering such as special access service, DS0 loops do not include incumbent LEC electronics that determine what services can be offered over the loop. TPx can deploy its own electronics on either end of the

DS0 loop, customizing and controlling the services provided over the loop, including service quality and security. TPx is not aware of any wholesale commercial offerings in the states we serve that would provide us with the same functionality as the DS0 loop. If DS0 loops were no longer available, TPx's nearly 14,000 EoC customers likely would need to find alternative broadband service at a higher rate or decrease speed or quality to maintain their current rate.

10. TPx often relies on bonded DS0 loops or DS1 UNEs to provide broadband service.[1] Copper-based broadband services such as EoC offer speeds ranging from 5 to 100 Mbps using 2 to 48 copper pairs, depending on the distance of the customer from the central office. TPx's average retail rates for EoC provided to its customers are **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** for 5 Mbps, **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** for 10 Mbps, and **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** for 20 Mbps.

11. EoC requires "home run" copper loops, that is copper from the central office to the customer premise. TPx uses approximately 122,000 DS0 loops to provide EoC, averaging approximately 8.86 loops per location. There is no wholesale substitute for the DS0 loops TPx uses to provide EoC.

12. TPx also uses approximately 22,000 UNE DS1s to provide business communication and networking services to its customers. There are technical limitations to how much bandwidth can be derived from bonded DS1s, meaning customers' needs for high speed broadband often cannot be met with DS1s. Electronics currently available permit bonding up to 8 DS1s to deliver 12 Mbps broadband to the customer.

[1] Bonded loops refers to two or more loops or UNEs electronically tied together to create an aggregate throughput/speed greater than any individual loop.

13. Because customer bandwidth demands increase, TPx tries to move its copper-based broadband customers to fiber last mile connections where they are available.

14. This summer, TPx compared its nearly 14,000 customer EoC locations to the fiber availability information it has from its database of approximately 40 vendors in California, Nevada and Texas. That comparison shows that 75% of locations lack a fiber connection.

(1) EoC customers with fiber in same building – 25.6%

(2) Fiber not in building but within 500' – 50.7%

(3) Fiber greater than 500' up to 1000' –12.8%

(4) Fiber greater than 1000' up to 2500' – 10.8%

15. Of the approximately **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** school, healthcare, non-profit and community anchor institutions TPx serves using EoC, **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** have no fiber-based broadband alternative at their location. Although the majority have a fiber-based alternative, the increase in their monthly rate likely would make continued competitive broadband service uneconomical for those customers who are not eligible for universal service subsidies. Without DS0 unbundling, even the TPx customers with fiber in the same building may not be able to afford the cost of fiber-based broadband and may lose their broadband service altogether.

16. In 2012, TPx evaluated extending fiber loops from its existing transport network to buildings which lack fiber alternatives to EoC. TPx began with a list of **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** near-net buildings. After substantial diligence and analysis, TPx reduced its list to approximately **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** near-net buildings but still could not establish a business case due to the cost and time associated with fiber deployment, including the cost and time of obtaining

necessary municipal/local permits which can take over a year in some cases. TPx estimated that it would cost at least **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** per location, including for locations within 1,000 feet of TPx's network. The economics of fiber deployment require TPx to have enough demand from customers to justify investing in fiber to the customers' premises. Without sufficient demand, the high sunk costs of expanding its network to near-net buildings is uneconomical. Purchasing UNEs helps TPx bridge the gap by enabling it to build a customer base that would support the substantial investments needed to deploy fiber. TPx has deployed fiber where demand supports it. Without access to UNEs, TPx's ability to scale its infrastructure to meet demand will be stymied.

17. TPx continues to submit requests to third parties to extend fiber to customer locations. For example, TPx tried to order 50 Mbps fiber build to serve a business located in California and an incumbent LEC proposed a special construction cost of more than **[BEGIN CONFIDENTIAL]** [redacted]. **[END CONFIDENTIAL]** Special construction costs proposed by the incumbent LEC for orders of 5 Mbps and 10 Mbps were even greater (*i.e.*, over **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**and **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** respectively). Another incumbent LEC proposed a special construction cost of over **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** for a 50 Mbps fiber build to a business located in a suburban city in Texas with a density of over 700 people per square mile, demonstrating that this is not only an issue in rural areas[2] but extends to the ability of providers to deploy fiber in urban and suburban areas.

[2] These rural areas are served by the former Regional Bell Operating Companies and not the small rural incumbent LECs that are exempt from unbundling requirements.

18. Based on the information provided to TPx by incumbent LECs, I understand that potentially thousands of incumbent LEC local serving offices ("LSOs") are not Ethernet-enabled, which means the incumbent LEC cannot offer wholesale fiber-based Ethernet to customer locations served by those LSOs. For example, approximately 30% of one incumbent LEC's LSOs are not Ethernet-enabled for wholesale offerings.

19. Unbundled copper loops are a crucial bridge between today's copper-based networks and the mainly-fiber networks of the future. Incumbent LECs offer TPx wholesale dedicated Internet access service over any transmission means, including copper loops, and TPx has assisted incumbent LECs with best practices to manage their dedicated Internet access over copper services. For those incumbent LECs that continue to rely in part on copper loops or subloops to offer broadband and phone service, denying TPx nondiscriminatory access to those unbundled loops would inhibit competition and deprive customers of existing competitive services and rates.

20. In addition to its wireline network using a combination of UNEs and facilities from third-party fiber providers, TPx operates one of the most robust fixed wireless networks in the western United States. Even after expansion and upgrades, however, TPx serves only approximately 2,650 locations with fixed wireless broadband.

21. A major obstacle to TPx further leveraging its fixed wireless broadband network is a lack of robust backhaul to support high-bandwidth demands. TPx has considered deployment of dark fiber to buildings which house its fixed wireless base stations to enhance the backhaul capabilities of its network, however such deployments (*i.e.*, by TPx or by a third-party fiber provider) raise the same issues of excessive cost and time to deploy fiber to the customer location. For example, in addition to municipal building permits, TPx and its third-party fiber

providers routinely experience difficulties and/or extraordinary costs to obtain access to multi-tenant environments ("MTEs") or to extend fiber to customers within the building. Most multi-tenant commercial buildings do not allow free timely access to entrance facilities, vaults, risers, power, and security environments required to provide service. Recurring costs of **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** are common.

22. In the vast majority of cases, TPx must purchase Ethernet loops from incumbent LECs under commercial agreements at rates that exceed by approximately **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** per location per month the cost of the DS0 loops TPx bonds to provide EoC. Some of TPx customers cannot afford the cost increase of fiber loops that TPx would have to pass through because of higher input costs. Other TPx customers are happy with their EoC service and do not want to switch service or customer premise equipment.

23. Because the underlying costs are much higher for fiber, even those EoC customers with fiber alternatives today may not be able to maintain broadband service if the DS0 loops were no longer available. This is because the average fiber loop costs are at least double and could be as much as five times higher than the copper loop costs. For example, the average monthly cost for all fiber Ethernet circuits (*i.e.*, at any bandwidth) is **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**and the average monthly cost for a 5-20 Mbps fiber Ethernet circuit is **[BEGIN CONFIDENTIAL]** [redacted]. **[END CONFIDENTIAL]** By contrast, the average monthly cost for existing EoC customers is less than a quarter of that cost at $96.56 (*i.e.*, 8.86 loops per location multiplied by the TELRIC $10.89 average UNE loop rate).

24. The average underlying loop cost increase to TPx for all EoC locations where fiber is now available is about **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** per

location per month. Because retail rates charged to end-users already include costs for collocation, building access, electronics, labor, etc., TPx would most likely need to pass its increased input costs directly to its customers to remain profitable and continue providing services. Many of TPx's small business, education, non-profit and government customers will not easily afford the monthly rate increase associated with this higher input cost if the DS0 loop is not available.

25. In addition to the monthly rate increase that would result if DS0 loops are no longer available, TPx estimates a one-time expense of approximately **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** per location using current labor costs for the truck roll and provisioning work necessary to transition each customer to fiber.

26. Although bonded special access DS1s could replace EoC in some instances, they generally can only provide speeds up to 12 Mbps.

27. Without access to bare copper to provide EoC, or a fiber alternative, TPx would need a DS3 to provide 20 Mbps or above of bandwidth. But the average **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** price to TPx of an incumbent LEC-provided DS3 (if available) far outstrips the revenue available for providing 20 to 50 Mbps of Ethernet to a medium or small business and even exceeds the **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** average retail revenue available for a 20 Mbps Ethernet service. Most customers are unlikely to accept downgraded service (1.54 Mbps, or up to 12 Mbps by bonding DS1s) or the same service at multiples of what they pay now.

28. If fiber is not available or affordable to build, and fixed wireless is not available, TPx could try to switch a customer to high speed Internet access ("HSIA"). The one-time cost to make that switch would include:

SD-WAN Software/Hardware Costs = **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**
Truck Roll (including installation and turn-up) = **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**
Provisioning (including scheduling, configuration, cut over) = **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]**
Total = **[BEGIN CONFIDENTIAL]** [redacted] [**END CONFIDENTIAL]**

29. Fiber-based HSIA for speeds of up to 20 Mbps can reach nearly **[BEGIN CONFIDENTIAL]** [redacted] [**END CONFIDENTIAL]** per month when provided by an incumbent LEC. Some incumbent LECs may provide HSIA over copper facilities at a lower price than HSIA over fiber, but these are the same facilities as those used today by competitors to provide EoC. Granting forbearance would allow incumbent LECs to continue using these legacy facilities while cutting off access for competitive providers.

30. If the Commission were to forbear from Section 251(c) as USTelecom requests, TPx would not be able to order new or replacement UNEs. Therefore, TPx would not be able to increase its customers' bandwidth, add additional services, or rectify service problems caused by failures in the copper loops provisioned as of the order's effective date. Nor could TPx order UNEs to serve new customers.

31. Granting forbearance could also strand TPx's approximately **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** investment per month in nearly 400 collocations in incumbent LEC central offices. TPx uses these collocations to support EoC, POTs, DSL, and DS1 services for its customers.

32. Given that most customers do not have fiber at their location, if the Commission were to grant forbearance, TPx would need time to determine what alternatives to UNEs are available, work with the customer on the requirements of the new service, place the order with the vendor,

and effect the move from copper to the alternative loop to get the customer's broadband service up and running.

33. TPx has requested information from incumbent LECs regarding planned commercial services and prices that it could purchase as an alternative to DS0 loops. Although some incumbent LECs have indicated when TPx can expect more information about commercial alternatives, no substantive details have been made available.

Customer Voice Lines Provisioned over UNEs or Using Resale

34. TPx uses approximately 148,000 analog DS0 loops and 12,000 resold lines to provide local exchange service using incumbent LEC UNE loops. TPx uses approximately 300 of its collocations in incumbent LEC central offices to support POTs. These numbers do not include approximately **[BEGIN CONFIDENTIAL]** [redacted] **[END CONFIDENTIAL]** local wholesale complete ("LWC") offerings purchased by TPx from AT&T.

35. In most cases, TPx already provides voice and broadband service to customers who purchase local exchange service and TPx's customers want local exchange service, typically referred to as Plain Old Telephone Service or POTs in addition for their fax and/or alarm services. Copper lines do not require backup power for continued operations while other alternatives (*e.g.*, wireless or fiber) require access to an independent power source. Some TPx customers (*e.g.*, banks and financial institutions) also prefer POTs out of security concerns.

36. If the DS0 loops were no longer available, TPx's POTs customers would be faced with diminished competition and price increases. Price is the only difference between DS0 loops used to provide POTs and commercial replacement products. Although AT&T's LWC offering is a functional substitute for POTs provided over DS0 loops, transitioning one DS0 loop used for

POTs to LWC would result in an immediate increased cost of approximately **[BEGIN CONFIDENTIAL]** ■■ **[END CONFIDENTIAL]** per POTs service.

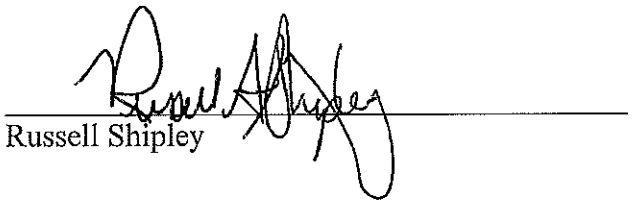
37. If these UNEs were no longer available and TPx were required to obtain a commercial replacement, TPx's investment in collocations and other equipment to provide POTs also would be stranded.

Wholesale Services Provisioned Using UNEs

38. TPx uses UNEs to provide wholesale services that its carrier customers use in different ways. TPx has approximately 90 wholesale customers served by UNEs in California, Nevada and Texas. TPx can deliver a UNE that enables the wholesale customer to expand its service area and reach retail customer locations outside its footprint. A wholesale customer can use a UNE that TPx obtains from an incumbent LEC to provide its retail end user with redundant circuits without the need to construct additional, dedicated infrastructure for that end user.

39. TPx also delivers UNEs that are middle mile and backhaul connections for wholesale customers with last mile networks in areas otherwise unserved by high speed broadband networks. One example is a project that TPx wholesale customer GeoLinks constructed in the Inland Empire area of California, a predominantly agricultural region that suffered from a lack of fiber infrastructure and minimal broadband availability. Utilizing middle mile UNEs from TPx, GeoLinks was able to construct last mile connections throughout the area, offering a competitive choice to consumers and high speed broadband connections to areas that had previously been without.

I declare under penalty of perjury that the foregoing statements are true and correct to the best of my information and belief.



Russell Shipley

August 6, 2018